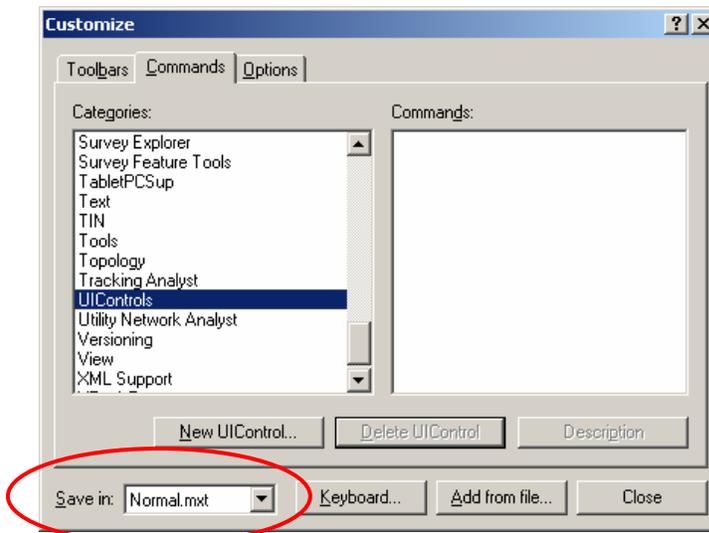


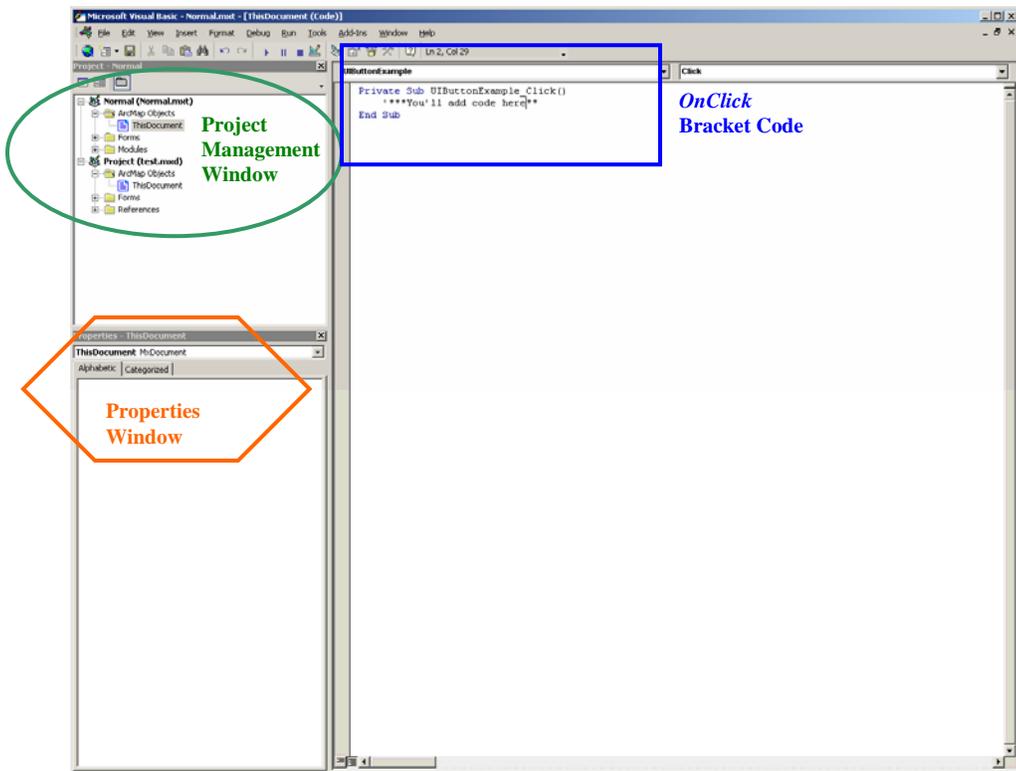
ArcMap VBA Customizing: Add a New Button to the User Interface (& call up a form)

These instructions describe how to add a button to the ArcMap interface and open a userform with VBA.

1. Start ArcMap.
2. Open the Customize dialog box: Tools → Customize...
3. Decide whether this customization will be applied to just the current project or to your default ArcMap interface. In the lower left corner of the dialog box, you will see a choice to “Save in:”. Choose one.
For the Current Project Only: Save in the *.mxd file (this will be your current filename)
For your ArcMap default interface: Save in the **Normal.mxt** file



4. Add a UIControl (button): Commands Tab → Categories → UIControl → click on “New UIControl” button → choose “UIButtonControl” and click on “Create”
*To change the name, single click on the new button in the right hand pane to select it, then click on it again and the name will be highlighted and available for change.
Click on the “Close” button on the Customize Dialog Box to close it.
5. Open the VBA Editor: Tools → Macros → Visual Basic Editor
6. Create code for the *OnClick* event of your button. Your code can be anything you want to happen when the user clicks on the button while in ArcMap.
 - a. Make sure you work in the correct project associated with the new button. Look for the project management window in the upper left area. *See circle in picture below.*
The Current Project Only: Work in the **Project (*.mxd)** section
Your ArcMap default interface: Work in the **Normal (Normal.mxt)** section.
 - b. Once you have decided on the project or normal section, navigate to the section’s ArcMap Objects subfolder → “This Document” and open it with a double click.
 - c. At the top of the document are two drop down menus
Left menu selection is the object: Choose the new UIButtonControl you created in step 4
Right menu selection is the user action: Choose “Click”
 - d. The bracket code will appear which is two lines, first line is the “Private” sub procedure and the last line is the end of the sub procedure. *See rectangle in picture below.*
 - e. Write your code in the middle the bracket code. Your code can be anything you want to happen when the user clicks on the button while in ArcMap. *In this example we will write code that opens a UserForm described in the next steps.*



7. Create or import the UserForm. Go to the project management window of the VBA Editor. Right click on either the **Normal** or **Project** section depending on where you are working.
 - a. If you are creating a new UserForm: Go to Insert → UserForm (manipulating the new form & adding its code will not be covered in these instructions)
 - b. If you are importing a downloaded or previously created UserForm: Click on “Import File..” and navigate to the *.frm file.
 - c. Either way, your new or imported UserForm will be in the “Forms” folder. If you want to (re)name your form, select the form in the project management window and its properties will become available in the properties window. **See the hexagon in the above picture.** Change the name in the (Name) property.
8. Return to the code for the *OnClick* event of your button. ArcMap Objects subfolder → “This Document” and open it with a double click. Chances are that this will be the only bracket code in the “This Document”. Type in the following code between the bracket code:


```
Private Sub UIButtonExample_Click() 'bracket code
    name_of_the_form.show
End Sub 'bracket code
```

The above code runs the “show” method for the form on the Click event. The “show” method loads the form into your computer’s memory and displays the form for the ArcMap user.
9. Now that the UserForm is added to your VBA project (step 7) and the UIButton has *OnClick* code (steps 6 & 8), close the VBA Editor. File → Close and Return to ArcMap
10. Add the button to your interface.
 - a. Open the Customize dialog box: Tools → Customize...
 - b. Go to the Commands Tab
 - c. Navigate to the UIControls Category
 - d. Drag the button’s icon to an existing toolbar
 - e. Close the Customized dialog box
11. Test your new button to make sure it is executing the code for the *OnClick* event.